

## ABSTRACT OF THE DISCLOSURE

An observing system(S) for observing a vocal cord(B), as a vibrating object, of a person to be inspected(A) comprises an image-pickup section(1) for picking up an image of the vocal cord(B) at a constant cycle, an extracting section(21a) for extracting a basic frequency of a generated voice, a frequency dividing ratio setting section(26) for variably setting a frequency dividing ratio with respect to the extracted basic frequency, a frequency dividing section(21b) for dividing the basic frequency at the set frequency dividing ratio, a trigger output section(21c) for outputting a trigger signal at the divided frequency, and video image making sections(21d, 22) capable of outputting only an image picked up by the image pickup section(1) immediately after the output of each trigger signal.

Owing to the above arrangement, a video image, which looks as if a vibrating object were moving in a slow motion manner, can be obtained.